1 47310-66 EWT(1)/FCC GW ACC NR AR6028405 SOURCE CODE: UR/0269/66/000/005/0055/0055

AUTHOR: Mustel', E. R.; Bonelis, I. V.; Kubyshkin, V. V.

B

TITLE: The effect of cosmic rays on the lowest layer of the Earth's atmosphere

SOURCE: Ref. zh. Astronomiya, Abs. 5.51.429

REF SOURCE: Astron. tsirkulyar, no. 333, iyulya 10, 1965, 1-6

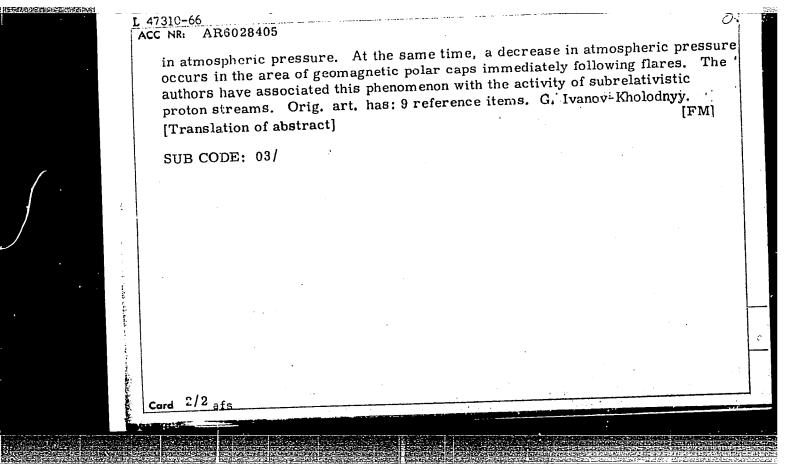
TOPIC TAGS: cosmic ray, atmospheric pressure, chromospheric flare, solar

flare

ABSTRACT: According to Soviet and Western Europe weather bureaus, the earth's atmospheric pressure increases on the 6th day after an active area passes through the center of the solar disk (an average of 13,878 active areas during the 1907-1952 period). This fact correlates with an increase in geomagnetic activity. After chromospheric flares, the atmospheric pressure on the Sun increases sychronously with an increase of geomagnetic activity (on the 4th day after a flare). Thus, the effect of solar corpuscular streams causes an increase

Card 1/2

UDC: 523, 75:523, 165+525, 24



ACC NR: AR6028770

SOURCE CODE: UR/0269/66/000/006/0064/0064

AUTHOR: Bonelis, I. V.; Zaleshchenko, R. I.

TITLE: Atmospheric disturbances in low latitudes and in the southern hemisphere, caused by recurrent corpuscular solar fluxes

SOURCE: Ref. zh. Astronomiya, Abs. 6.51.489

REF SOURCE: Sb. Solnechn. aktivnost'. No. 2. M., Nauka, 1965, 88-91

TOPIC TAGS: solar activity, solar disc, solar disturbance

TRANSLATION: The relationship between disturbances in the lower atmosphere and the passage of active areas through the center of the solar disc was examined. Data on solar activity for 1957-59 and 1961-62 were used. Seven geographic points in the preequatorial zone and the southern hemisphere were considered. The principal source material used was data on atmospheric pressure in South America. The maximum pressure for all points was noted on the sixth day after the active area passed through the center of the solar disc. Previously, the authors obtained similar results for the northern hemisphere. A relationship between the amplitude of atmospheric disturbances and the geomagnetic latitude exists both in the southern and northern hemispheres. Il references. B. Rubashev.

SUB CODE: 03

Card 1/1

UDC: 523.75:525.23

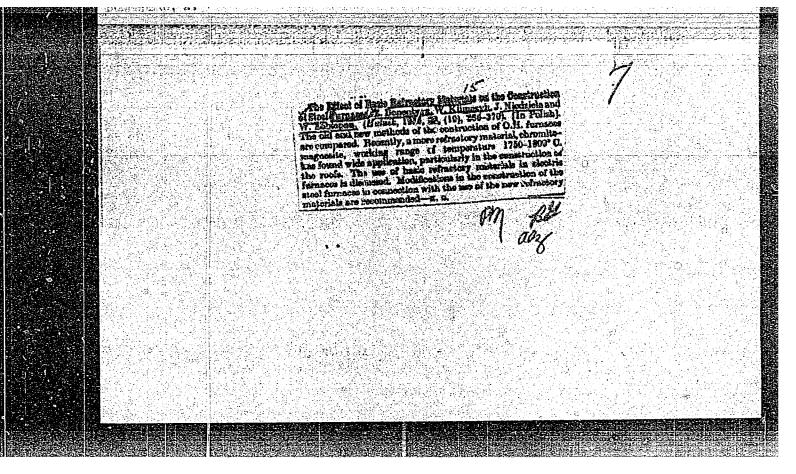
BONENBURG, Lucyna; GIOWACKA, Roza; PETBLENZOWA, Teresa

A case of excretion of a large biliary calculus by vesicocolic fistula with spontaneous closure of the fistula. Polski tygod. lek. 14 no.42:1875-1878 19 Oct 59.

1. (Z II Kliniki Chorob Wewnetrznych Sl. A. M. w Zabrzu; kierownik: prof. dr med. Witold Zahorski i Zakladu Radiologii Lek. Sl. A. M. w Zabrzu; kierownik: prof. dr med. Stanislaw Januszkiewicz)

(RRCTAL PISTULA) (INTESTINAL PISTULA)

(CHOLELITHIASIS)

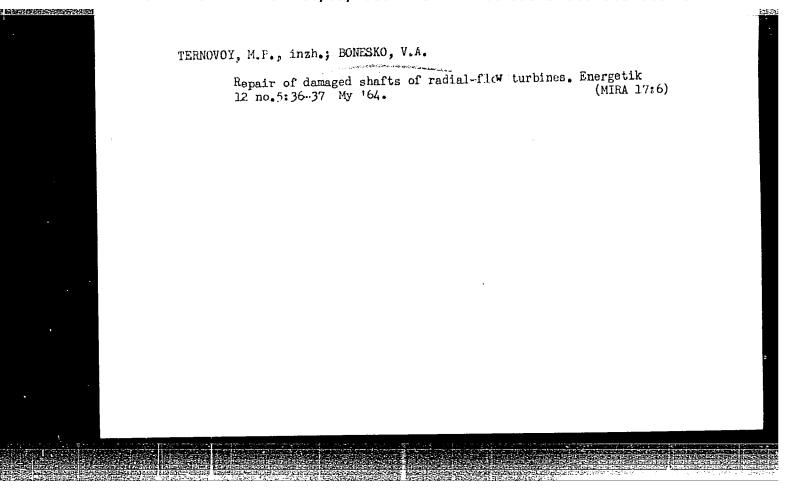


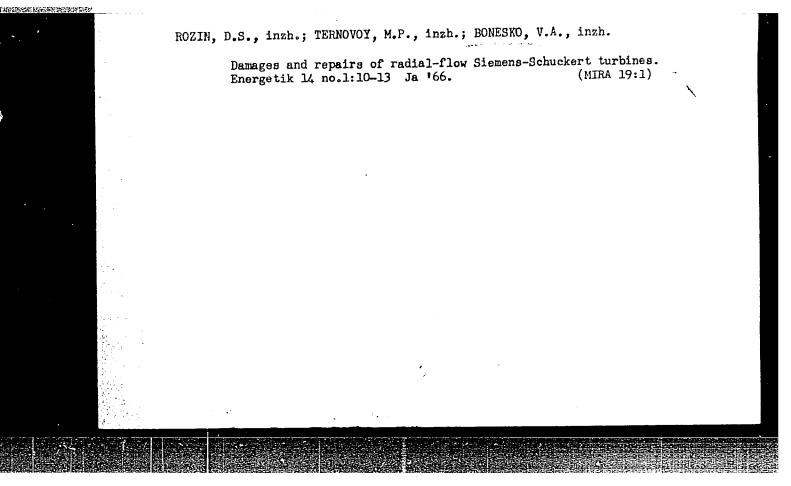
BONE BERG, Z.

The open-hearth furnace and its new profile. p. 27.

PROBLEMY PROJEKTOWE HUTNICTWA. (Biruo Projektow Frzemyslu Hutniczego, Biuro Projektow Przemyslu Stalowego i Biuro Projektow Przemyslu Metalowego), Gliwice, Poland Vol. 7, No. 1, Jan 1959

Monthly List of East European Accessions Index (EEAI), LC, Vol. 8, No. 11, November 1959 Uncl.





"Investigation of the Polarization of Precooled Organic Liquids in Connection With the Chemical Structure of Molecules." Sub 5 Oct 51, Moscow Order of Lenin State U imeni M. V. Lomonosov.

Dissertations presented for science and engineering degrees in Moscow during 1951.

SO: Sum. No. 480, 9 May 55

DUNGSTERNESSEEN TAGES

CANd. Chemical Sci.

BONE TSKAYA H.K.

USSR/Chemistry

Physical chemistry

Card

: 1/1

Authors

: Komandin, A. V., and Bonetskaya, A. K.

Title

2 Dipole moments of certain salicylic acid derivatives

Periodical

: Zhur. fiz. khim. 28, Ed. 6, 1113 - 1119, June 1954

Abstract

The dipole moments of methyl salicylate, ethyl salicylate, isoamyl salicylate, phenyl salicylate and 2-naphthyl salicylate, were measured in benzene solutions and the dipole moments of orthoacetoxybenzoic acid in a diexane solution at 25°. The laws governing the change in dipole moments in many salicylic acid derivatives and the effect of the intramolecular hydrogen bond on the change of the dipole bonds, are explained. Drawing of the device used in measuring the dielectric permeability of the solutions, is included. Twenty references: 4 USSR, 16 German and English. Tables.

Institution

The M. V. Lomonosev State University, Moscow

Submitted

November 13, 1953

DONETSKAYA, A.K.

USSR/Chemistry - Physical chemistry

Card 1/1 Pub. 147 - 12/25

Abstract

Authors : Komandin, A. V., and Bonetskaya, A. K.

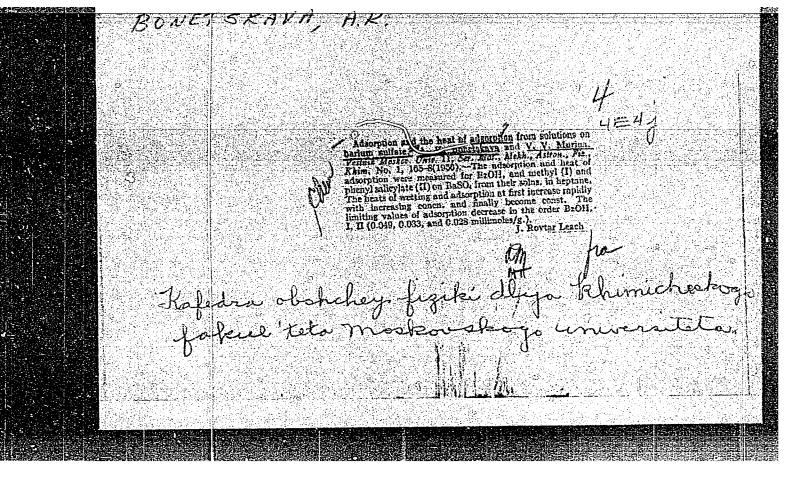
Title : Dipole moments of orthohydroxybenzoic acid substitutes

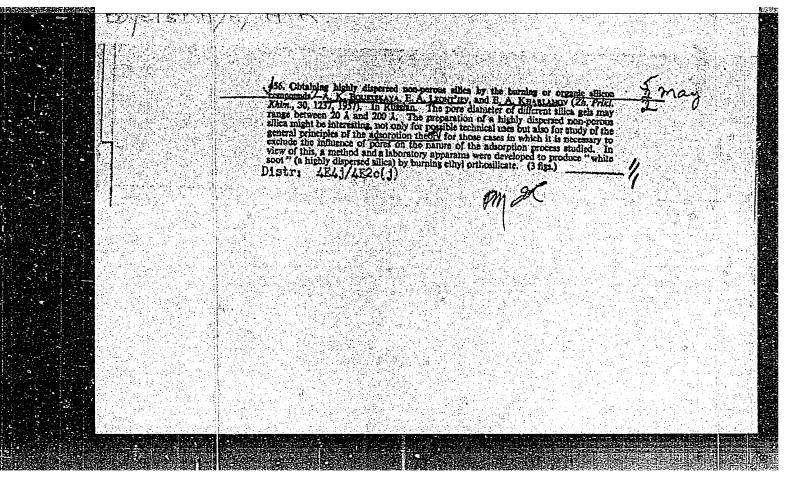
Periodical: Zhur. fiz. khim. 28/10, 1789-1794, Oct 1954

In order to explain the effect of the hydrogen bond on the dipole moment, the authors measured the dipole moments of the following substitutes of orthohydroxybenzoic acid; orthomethoxy- and orthophenoxybenzoic acid, methyl ether of orthomethoxybenzoic acid and salipyrine (the letter represents a molecular compound of salicylic acid and antypyrine). Data regarding the measured dielectric permeability, density, and index of refraction for various concentrations of the dissolved substances are presented. The chemical structure of the substitutes is described. Twelve references: 4-USSR; 5-German; 2-USA and 1-French (1893-1954). Tables.

Institution: The M. V. Lomonosov State University, Moscow

Submitted: February 17, 1954





20-114-6-33/54 Bonetskaya, A. K., Krasil'nikov, K. G. AUTHOES:

The Adsorption of Aliphatic Alcohols From Solutions on TITLE:

Silica Gel and White Soot (Adsorbtsiya alifaticheskikh spirtov iz rastvorov na

silikagele i beloy sazhe).

PERIODICAL: Doklady AN SSSR, 1957, Vol. 114, Nr 6, pp. 1257-1260 (USSR)

From earlier papers (references 1,2,11) follows that the ABSTRACT: adsorbed maximum amound of alcohols and acids of the homologous

series with an increase in the hydrocarbon radical decreases to porous hydrophile adsorbents. In this connection the highest adsorption value in the case of comparatively coarsegrained adsorbents remains constant (references 3, 11). The reduction of absorption in the homologous series was explained by a volume-interaction in solutions (different solubility of the terms of the homologous series, reference 1) or ascribed to the influence of the porous structure of the adsorbent (references 3,5). In the case of the nonporous hydrophile

absorbents it could be expected (references 2-4) that the adsorbed maximum quantity of the alcohols and acids of the

homologous series was constant. The adsorption measurements

Card 1/5

CIA-RDP86-00513R000206310004-5"

APPROVED FOR RELEASE: 06/09/2000

The Adsorption of Aliphatic Alcohols From Solutions on Silica Gel and White Soot

20-114-6-33/54

on nonporous hydrophobe adsorbents for unlimitedly soluble alcohols and acids from aqueous solutions (references 6,7) show that the limit of adsorption is shifted upward with the number of carbon atoms in the molecule. Comparisons of adsorption isothermal lines for hydrophile adsorbents are, as far as is known, absent. In the present work the authors performed the adsorption of a number of normal aliphatic alcohols from solutions in CC1 on 2 silica samples of different structure. Silica gel KSK-2 (reference 9) was the porous sample. So-called white soot was used as nonporous sample. The samples were sharply different in their structure, but possessed a practically equal hydrated surface. As follows from figure 1 A, the results obtained from both samples are qualitatively not different from each other, for in both cases the maximum value of adsorption decreases with the lengthening of the carbon chain. This value is shifted into the domain of smaller equilibrium concentrations (reference 12). If it is assumed that this decrease can be effected by the competition of the solvent, the adsorption of the latter should increase with

Card 2/5

The Adsorption of Aliphatic Alcohols From Solutions on Silica Gel and White Soot

20-114-6-33/54

a decrease of the adsorption of alcohol, i.e. on transition to the higher alcohols. The authors tried an extrapolation of the inclined part of the adsorption isotherm of octylalcohol on silica gel to the domain of high concentrations, so that a value was obtained which lies close to the concentration of pure alcohol. Due to the inaccuracy of such an extrapolation additional tests on the adsorption of CCl<sub>4</sub> and its solutions in octylalcohol were carried out. But no perceptible modifications of adsorption were determined in the domain of concentrations in cuestion here. From the isothermal lines obtained the authors calculated the values of the total content of the adsorbed substance in the surface layer a (table 1). Thus the decrease in adsorption of the alcohols with a lengthening of the hydrocarbon chain cannot be ascribed to the competition of the solvent. The authors try to explain this phenomenon by a special mode of orientation of the alcohol-molecules in the solid surface layer so that the chains predominantly "lie" on the surface. In such a case the surface taken up by the molecule will be dependent on the above-mentioned length of chain. For determining the

Card 3/5

The Adsorption of Aliphatic Alcohols From Solutions on Silica Gel and White Soot

20-114-6-33/54

influence of the porous structure upon the maximum value of absorption the obtained results were related to 1 m. of the surface. The adsorption isothermal lines of methyl alcohol on both adsorbents agree (figure 1 B). The adsorption on the porous sample increases with increasing number of carbon atoms. According to table 1 and figure 2 the maximum volume of the adsorption of all investigated alcohols changes little on nonporous soot.

There are 2 figures, 1 tables, and 16 references, 11 of which are Slavic.

ASSOCIATION: Moscow State University imeni M. V. Lomonosov,

(Moskovskiy gosudarstvennyy universitet im. M. V. Lomonosova)

Card 4/5

The Adsorption of Aliphatic Alcohols From Solutions on 20-114-6-33/54 Silica Gel and White Soot

PRESENTED: January 8, 1957, by M. M. Dubinin, Academician

SUBMITTED: December 29, 1956

Card 5/5

SOV/156-59-1-28/54 5(3) Skuratov, S. M., Monayenkova, A. S. AUTHORS: Bonetskaya, A. K., The Determination of the Purity of Organic Substances With TITLE: the Aid of Melting Curves (Opredeleniye chistoty organicheskikh vesnchesty po krivym plavleniya) Nauchnyye doklady vysshey shkoly. Khimiya i khimicheskaya PERIODICAL: tekhnologiya, 1959, Nr 1, pp-113-116 (USSR) A method is proposed for which only small quantities are ABSTRACT: required (0.4 mole). The apparatus shown comprises an aluminum block, which is electrically heated from the outside and in which the cone-shaped measuring vessel is introduced. In the measuring vessel (which consists of 0.4 mm thin silver plate) a solid silver cone is centrically suspended with a clearance of 0.6-0.7 mm between the cone and the wall of the measuring vessel. The cone contains a thermocouple of high sensitivity. The temperature gradient between the aluminum block and the sample is maintained constant by another thermocouple. The sample is introduced in a molten state into the measuring vessel and the silver cone is suspended in the vessel to urge the sample as a thin layer against the wall of Card 1/2 the vessel. The apparatus was tested with diphenyl-amine,

SOV/156-59-1-28/54 The Determination of the Purity of Organic Substances With the Aid of Melting Curves

> diphenyl and caprolactam, to which up to 1 mole-percent of other substances had been admixed. The tables show that impurities between 0.3 and 0.7 mole-percent were indicated with an accuracy of  $\pm$  0.03 mole-percent. Ye. N. Kanarskaya, I. Ye. Paukov, V. V. Ponomarev, and Yu. I. Rubtsov assisted in this work. There are 1 figure, 2 tables, and 9 references, 1 of which is Soviet.

ASSOCIATION: Kafedra fizicheskoy khimii Moskovskogo gosudarstvennogo

universiteta im. M. V. Lomonosova

(Chair of Physical Chemistry of Moscow State University imeni

M. V. Lomonosov)

SUBMITTED: June 28, 1958

Card 2/2

5(4) AUTHORS:

Komandin, A. V., Bonetskaya, A. K.

SOV/76-33-3-10/41

TITLE:

Density and Molar Volume of Several Organic Compounds in a Broad Range of Temperature (Plotnosti i molyarnyje ob"yemy nekotorykh organicheskikh soyedineniy v shirokom intervale temperatur)

PERIODICAL:

Zhurnal fizicheskoy khimii, 1959, Vol 33, Nr 3,

pp 566 - 571 (USSR)

ABSTRACT:

Density and molar volume in the temperature range 100-2000 were determined for the liquid and supercooled liquid state of the following 11 substances: methyl-, ethyl-, isoamyl-, phenyl-, (salol) and 2-naphthyl- (betol)-esters of o-hydroxy benzoic acid, o-acetoxy benzoic acid (aspirin), the methyl esters of o-methoxy benzoic acid, salipyrine, o-methoxyphenol (guaiacol), 3-methyl-6-isopropylphenol (Thymol) and benzophenone. Density in solid state was determined at room temperature for: the phenyl- and 2-naphthyl esters of o-hydroxy benzoic acid, o-aceto benzoic acid, 3-methyl-6-isopropylphenol and benzophenone; these data are, however, to be re-

Card 1/2

Density and Molar Volume of Several Organic Compounds SOV/76-33-3-10/41 in a Broad Range of Temperature

garded as orientation data only. The production of guaiacol, thymol and benzophenone is given, the way of production of the other substances has already been described (Ref 4). The density was measured by means of a pycnometer-dilatometer of the Biron-type (Ref 5). Table 2 shows that the temperature function of density develops linearly for all substances investigated. There are 3 tables and 5 references, 2 of which are Soviet.

ASSOCIATION:

Moskovskiy gosudarstvennyy universitet im. M. V. Lomonosova

(Moscow State University imeni M. V. Lomonosov)

SUBMITTED:

June 25, 1957

Card 2/2

5 (4)

LONG BURNESS CONTROL OF THE CASE OF THE CA

AUTHORS: Komandin, A. V., Bonetskaya, A. K. And the desired to the second the second sec

SOV/76-33-5-3/33

(Moscow)

TITLE:

The Dielectric Constant of Esters of Orthohydroxy Benzoic Acid in a Wide Temperature Interval (Dielektricheskaya pronitsayemost slozhnykh efirov ortogidroksibenzoymoy kisloty v

shirokom intervale temperatur)

PERIODICAL:

Zhurnal fizicheskoy khimii, 1959, Vol 33, Nr 5, pp 976 - 982

(USSR)

ABSTRACT:

This paper describes measurements of the dielectric constants of methyl, ethyl, isoamyl, phenyl, and 2-naphthyl ester of the acid mentioned in the title. The measurements were carried out in a liquid and undercooled liquid state within a temperature interval ranging of from a temperature below melting point to a temperature at which the dielectric constant decreased rapidly to low values with a constant frequency of the outer electric field; these values did not vary with further temperature decrease and approached the square of the refractive index, i.e. the total amount of electronic and atomic polarization. Figure 1 shows the construction of the condenser used

Card 1/3

for the measurements. By using a special glass filter crystal-

The Dielectric Constant of Esters of Orthohydroxy Benzoic Acid in a Wide Temperature Interval sov/76-33-5-3/33

lization germs were prevented from being carried along with the liquid and the measurement in undercooled state up to glass-shaped modification without spontaneous crystallization was rendered possible. Tables 1 - 5 show the values of the dielectric constant for the esters mentioned; moreover, the values computed for the Kirkwood coefficient g, as well as for the general and orientation polarization. Figure 2 shows the shape of the curve of the dielectric constant depending on temperature. Hence it appears that with decreasing temperature

and constant frequency of the cuter electric field (1.72.10 cycles) the value of the dielectric constant increases, reaches a maximum, and then decreases rapidly to low values. There is a relation between the molecular structure of the substances investigated and the variation of the dielectric constants. The more complicated the structure of the substituent, the lower and flatter the curve of the dielectric constant. The maxima of the dielectric constants are influenced in a similar way. These turning points could be reproduced with an accuracy

Card 2/3

The Dielectric Constant of Esters of Orthohydroxy SOV/76-33-5-3/33 Benzoic Acid in a Wide Temperature Interval

of 1 - 2° and represent a specific quantity as to the liquid concerned. There are 2 figures, 5 tables, and 12 references, 6 of which are Soviet.

SSOCIATION: Moskovskiy gosudarstvennyy universitet im. M. V. Lomonosova (Moscow State University imeni M. V. Lomonosov)

SUBMITTED:

November 25, 1957

Card 3/3

BONETSKAYA, A. K., VOLOKHINA, A. V., KUDRYAVTSEV, G. I. and SKURATOV, S. M. (USSR)

Protsess pollamidirovaniya v tverdoi faze Polyamidation reaction in the solid phase IUPAC S II:465-71

report presented at the Intl. Symposium on Macromolecular Chemistry, Moscow, 14-18 June 60.

BONETSKAYA, A.K.; YEROFEYEVA, N.F.; SKURATOV, S.M.

Kinetics and thermal effect of the hydrolysis of some lactams.

Izv.vys.ucheb.zav.; khim.i khim.tekh. 3 no.6:1027-1030 '60.

(MIRA 14:4)

1. Moskovskiy gosudarstvemnyy universitet imeni M.V.Lomonosova, kafedra fizicheskoy khimii.

(Lactam)

S/076/60/034/04/24/042 B010/B009

AUTHORS:

Komandin, A. V., Bonetskaya, A. K. (Moscow)

TITLE:

The Dielectric Constants of Some Organic Compounds Within a Broad

Temperature Range

PERIODICAL:

Zhurnal fizicheskoy khimii, 1960, Vol. 34, No. 4, pp. 845 - 849

TEXT: In continuation of previous papers (Refs. 1,2) concerning the relation between the dielectric properties and chemical structures of organic substances in liquid and supercooled liquid phases the dielectric constants of the methyl esters of o-methoxybenzoic acid, o-acetoxybenzoic acid, salipyrine, and benzo-phenone were measured. The measurements were made by means of an apparatus previously described (Ref. 3) at a frequency of 1.72·10 cps and temperatures of from 200 to 400°K. The measured values of the dielectric constants and densities of the substances under investigation as well as the calculated values of the total and oriented polarizations for both the liquid and supercooled phases and of the Kirkwood coefficients g of the intermolecular interaction are given in Tables 1-4. As in the earlier investigations, the curve of the dependence of the

Card 1/2

The Dielectric Constants of Some Organic Compounds Within a Broad Temperature Range

\$/076/60/034/04/24/042 B010/B009

dielectric constant upon temperature was observed to show that with decreasing temperature the dielectric constant increases, passes through a maximum, and then drops abruptly to very low values (within a narrow temperature range). The course of the temperature curves in connection with the chemical structures of the substances under investigation is discussed. There are 1 figure, 4 tables, and 6 references, 4 of which are Soviet.

SUBMITTED: July 5, 1958

Card 2/2

BONETSKAYA, A.K.; YEROFEYEVA, N.F.; SKURATOV, S.M.; MUROMOVA, R.S.

Kinetics and thermal effect of the hydrolysis of some N-substituted lactams. Izv.vys.ucheb.zav.; khim.i khim.tekh. 4 no.1:74-77 '62.

(NIRA 14:6)

1. Moskovskiy gosudarstvennyy universitet imeni M.V.Lomonosova, kafedra fizicheskoy khimii.

(Lactams) (Hydrolysis)

S/190/62/004/012/002/015 B101/B186

AUTHORS: .

Skuratov, S. M., Yenikolopyan, N. S., Bonetskaya, A. K.,

Voyevodskiy, V. V.

TITLE:

Mechanism of lactam polymerization

PERIODI CAL:

Vysokomolekulyarnyye soyedineniya, v. 4, no. 12, 1962,

1770-1778

TEXT: In continuation of papers of 1952-54 (last publication Dokl. AN SSSR, 95, 1017, 1954), the polymerization of ε-caprolactam and ξ-enantholactam was studied in the presence of water, water and acid, and water and alkali at 231.5°C. A slightly modified reaction scheme is proposed on the basis of experimental results concerning induction period, maximum reaction rate, time before maximum reaction rate is reached, degree of conversion, heat

effect of the reaction: (1) B + H<sub>2</sub>0  $\frac{k_1}{k_1}$  AH; (2) AH + AH  $\frac{k_2}{k_2}$  P + H<sub>2</sub>0;

(3) AH + P  $\xrightarrow{k_3}$  P + H<sub>2</sub>O; (4) AH + B + X  $\xrightarrow{k_4}$  P + X; (5) B + P  $\xrightarrow{k_5}$  P;

Card 1/3

5/190/62/004/012/002/015 B101/B186 Mechanism of lactam ...  $B + H_2O + X$ ; where B = 1actam. AH + X; (7) AH + X -(6)  $B + H_2O + X$ The probable course of these AH = amino acid, P = polyamide, X = catalyst. reactions under different conditions is discussed, and the following equations are derived for the rate of polymerization, w: (A) for polymerization of  $\epsilon$ -caprolactam in the presence of  $H_2O$ :  $w = \alpha'[H_2O][B]([B_o]^2 - [B]^2)$ , where  $\alpha' = k_4 k_6 / 2k_7$ ; (B) for polymerization of f-enantholactam in the presence of water:  $w = \alpha'[H_2O][B]\sqrt{[B_0]^2 - [B]^2}$ ; where  $\alpha' = k_5^{0.5}k_2^{0.5}k_6/k_3$ ; (C) for polymerization of E-caprolactam in the presence of H2O and H3PO4:  $w = \beta' \sqrt[4]{[AcH][B]} \sqrt{[B_0]^2 - [B]^2}$ , where  $\beta' = (k_4 k_5 k_6 [H_2 0]/k_7)^{0.5}$ , and AcH = acid; (D) for polymerization of f-enantholactam in the presence of  $H_2O$  and  $H_2PO_4$ :  $w = \alpha \cdot \sqrt[4]{[AcH]}[B] \sqrt[4]{[B_0]^2 - [B]^2}$ , where  $^{0.25}_{k_{5}}^{0.75}_{k_{6}}^{0.5}_{6}^{[\text{H}_{2}0]}^{0.5}/_{k_{3}}^{0.5}$ ; (e) in the polymerization of  $\epsilon$ -caprolactam and f-enantholactam in the presence of H<sub>2</sub>O and NaOH, the presence of Card 2/3

#### "APPROVED FOR RELEASE: 06/09/2000

## CIA-RDP86-00513R000206310004-5

Mechanism of lactam...

5/190/62/004/012/002/015 B101/B186

NaOH only reduces the induction period without affecting the polymerization kinetics proper. All the experimental results are satisfactorily explained by these equations. There are 3 tables.

ASSOCIATION: Moskovskiy gosudarstvennyy universitet im. M. V. Lomonosova

(Moscow State University imeni M. V. Lomonosov)

SUBMITTED:

June 24, 1962

Card 3/3

S/190/62/004/012/003/015 B101/B186

AUTHORS: Yenikolopyan, N. S., Bonetskaya, A. K., Skuratov, S. M.

TITLE: Induction period of ε-caprolactam and ξ-enantholactam

polymerization under various conditions

PERIODICAL: Vysokomolekulyarnyye soyedineniya, v. 4, no. 12, 1962,

1779-1783

TEXT: A set of reaction equations was drawn up in a previous paper (Vysokomolek. soyed., 4, 1770, 1962) for the polymerization of E-caprolactam and (-enantholactam in the presence of water, water and acid, and

water and alkali: (1)  $B + H_2O + AH$ ; (2)  $AH + AH \rightarrow P + H_2O$ ; (3)  $AH + P \rightarrow P + H_2O$ ; (4)  $AH + B + X \rightarrow P + X$ ; (5)  $B + P \rightarrow P$ ;

(6)  $B + H_2O + X \xrightarrow{k_6} AH + X$ ; (7)  $AH + X \xrightarrow{k_7} B + H_2O + X$ ; where B = lactam,

AH = amino acid, P = polyamide, X = catalyst, whose functioning groups are either the end-groups of P, in the case of polymerization with water, or Card 1/3

s/190/62/004/012/003/015 B10.1/B186 Induction period of ...  $H_{\chi}^{T}$ 0 ion in the case of polymerization in the presence of acid. present paper, the experimental data are used for deriving equations for the induction period as dependent on the amount of H20 added. Reaction (1) catalyzed by the amino acid gives rise to: B + H<sub>2</sub>O + AH  $\alpha = k_5^{\dagger}k_1[B]/k_1^{\dagger}$ , and induction period  $t = (1/\varphi) \ln w/\alpha$ ; where  $w = \alpha e^{\varphi}$ In agreement with the experiment, the induction period is inversely proportional to the amount of water added. The induction period decreases with an increased addition of NaOH. In this case, the cooperation of the hydroxyl ion must be taken into account besides reaction (1) and the  $\stackrel{\text{k''}}{\longrightarrow} \text{AH} + \text{OH}^-.$ B + H<sub>2</sub>O + OH catalysis by the amino acid:  $t = (1/\phi)(\ln w - \ln \alpha)$ , where  $\phi = k_2[B][H_2O]$ ,  $\alpha = k_5[k_1^*][B][OH^*]/k_1^*$ . Consequently, the kinetics of polymerization proposed interprets the reaction courses correctly. There are 2 figures and 1 table.

APPROVED FOR RELEASE: 06/09/2000 CIA-RDP86-00513R000206310004-5"

Card 2/3

Induction period of...

S/190/62/004/012/003/015
B101/B186

ASSOCIATION: Moskovskiy gosudarstvennyy universitet im. M. V. Lomonosova (Moscow State University imeni M. V. Lomonosov)

SUBMITTED: June 24, 1961

SKURATOV, S.M.; YENIKOLOPYAN, N.S.; BONETSKAYA, A.K.; VOYEVODSKIY, V.V.

Mechanism of lactam polymerization. Vysokom. soed. 4 no.12:1770-1778
D'62.

1. Moskovskiy gosudarstvennyy universitet imeni Lomonosova.
(Lactams)
(Polymerization)

YENIKOLOPYAN, N.S.; BONETSKAYA, A.K.; SKURATOV, S.M.

Induction periods of  $\mathcal{E}$ -caprolactam and  $\mathcal{E}$ -enantholactam polymerization reactions under various conditions. Vysokom. soed. 4 no.12:1779-1783 D '62. (MIRA 15:12)

1. Moskovskiy gosudarstvennyy universitet imeni Lomonosova.
(Azapinone) (Azocinone) (Polymerization)

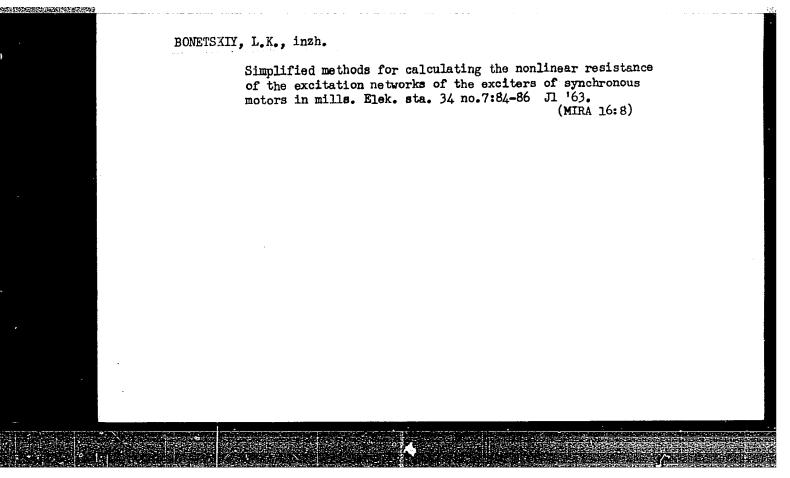
ENT(m)/EPF(o)/ENP(3)/T Pc-4/Pr-4 RM ACCESSION NR: \$/0190/65/007/003/01/85/01/90 AP500837L AUTHORS: Salematina, O. B.; Benetskays, A. K.; Skurstov, S. H.; Fabrichnyy, B. P.; Shalavina, I. F.; Gol'dfarb, Ya. L. TITIE: Kinetics and thermal effect of polymerization of some C-alkyl substituted lactams SOURCE: Vysokomolekulyarnyys soyed; enlya, v. 7, no. 3, 1965, 165-190 TOPIC TAGS: alkylation, polymerization, kinetics, thermal effect ABSTRACT: A study was made of the kinetics of polymerization of 5-CH3-, 7CH3-, 702Hg-and 703H7-caprolactams and 8-C2Hg- and 803H7-enantholactams in the presence of water alone and with different amounts of phosphoric acid at 2400. The 7-03H7-caprolactam was synthesized. The others were obtained from VHIIV. For polymerization in water it was found that the process is autocatalytic for C-alkyl substituted and unsubstituted lactans alike, that the substitution in a lactan molecule sharply lowers the reaction rate, that the degree of conversion from monomer to polymer at maximum rate also declines markedly for both alkylated caprolactams and alkylated mantholactams, and that the time of reaching maximum Cord 1/2

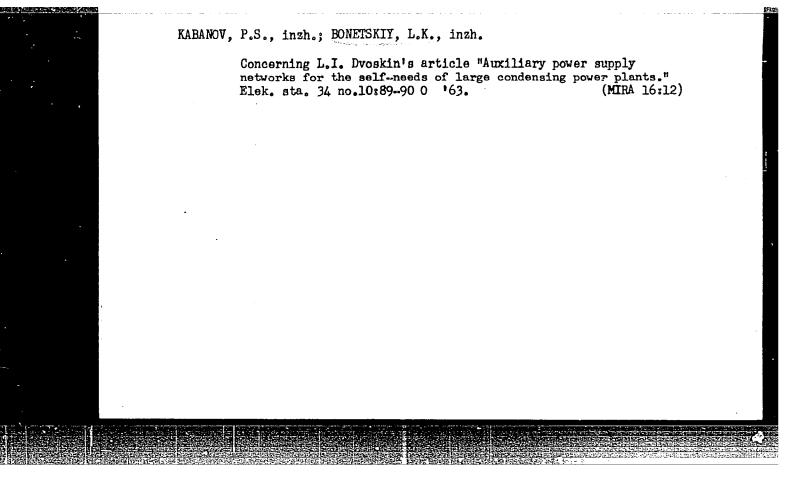
L 38634-65 ACCESSION NR: AP5008374 reaction rate for these monomers is increased. When phosphoric acid is present with the water the maximal reaction rate is markedly increased, the rate increasing with concentration of acid; the degree of conversion at the maximum rate decreases and does not depend on the acid concentration; and the time for reaching maximum rate is strongly reduced. It was found that the maximal rate depends on the position of the substituted alkyl in the ring, and that this rate decreases with increase in length of the substituted alkyl. Methyl substitution in caprolacters lowers the thermal effect of polymerization. Athyl substitution increases the effect, and propyl substitution does no openge it. Orig. art. has: 3 figures and 3 tables. ASSOCIATION: Hoskovskiy gosudarstysmyy um varsitet in. M. V. Lomonosova (Hoscov State University); Institut organicheskoy khimii im. Zelinskogo. AN SSSR (Institute of Organic Chemistry, AN SSSR) SUBMITTED: 30May61 ENGL: 00 SUB CODE: OC, MT NO REF SOV: 1007 OTHER: OLL Cord 2/2 /

CHIL'-GEVERGYAN, G.M.; BONETSKAYA, A.K.; SEURATOW, F.M.

Automation of a double calcrimater for measuring the kinetics of polymerization reaction. Zhur.fiz.khim. 39 no.7:1792-1797 JI '65. (MRA 18:8)

1. Mcskovskiy gosudarstvennyy universitet imeni M.V.Lomonosova.





BONEV, A.

Preparation for the annual closing of accounts. p. 25.

Vol. 10, no. 11, Nov. 1955 KOOPERATIVNO ZEMEDELIE Sofiya, Bulgaria

So: Eastern European Accession Vol. 5 No. 1 Jan. 1956

BONEV, A.

Secular change of the solar activity. p. 129.

GODISHNIK. MATERMATIKA I FIZIKA. Sofiia, Bulgaria, Vol. 50, no. 1 pt. 2. 1955/56 (published 1958)

Monthly List of East Accession (EEAI) LC, Vol. 9, No. 1 January 1960 Uncl.

ACC NR: AP6023498

AUTHOR: Kiryakov, I.; Bonev, A.; Spirov, G.

ORG: Institute for Scientific Research in Dermatology and Venereology/headed by Prof. P. Popkhristov/ (Nachroizsledovatelski kozhno-venerologichen institut)

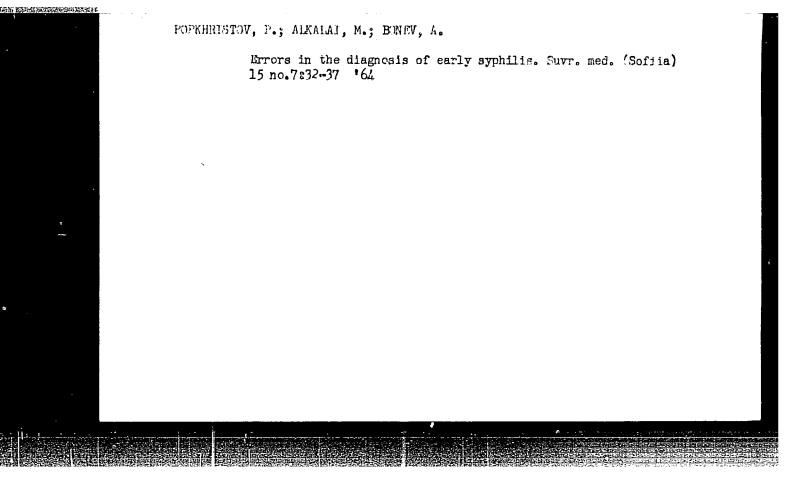
TITLE: Some aspects of the epidemiology of lues

SOURCE: Suvremenna meditsina, no. 7, 1965, 405-408

TOPIC TAGS: epidemiology, nervous system disease, genitourinary system disease, infective disease, man

ABSTRACT: In one group, up to 65% of male syphilitic patients had contracted the infection during homosexual relationships; analysis of 154 homosexual men: ages (80 were below 25 years old) 69 'true' and 85 'occasional' or 'opportunistic' homosexuals; lues was diagnosed in 57 (37%) mostly with 'atypical' (i.e. anal, etc.) lesions. [Based on authors' Eng. abst.] [JPRS]

SUB CODE: 06 / SUBM DATE: OOMar65 / ORIG REF: OO2 / OTH REF: O15



KIRIAKOV, Iv.; BONEV, A.; SPIROV, G.

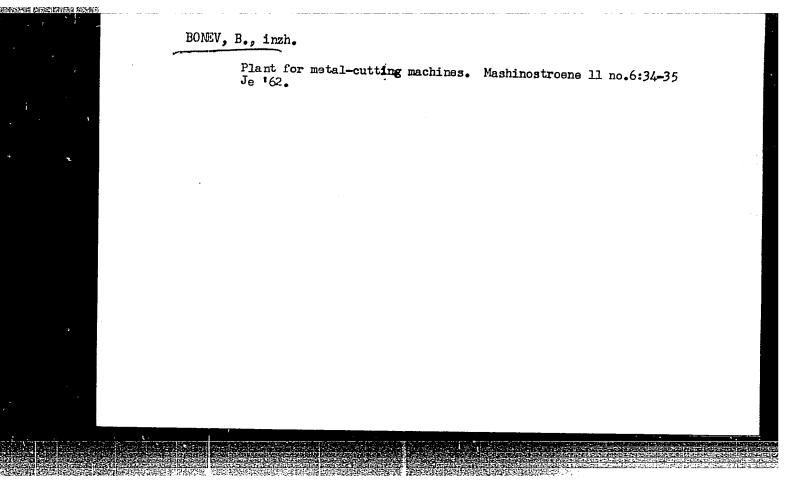
Some observations on the distribution of syphilis. Suvr. med. (Sofiia) 16 no.71405-408 '65.

1. Nauchnoizsledovatelski kozhno-venerologichen institut (direktor prof. P. Popkhristev).

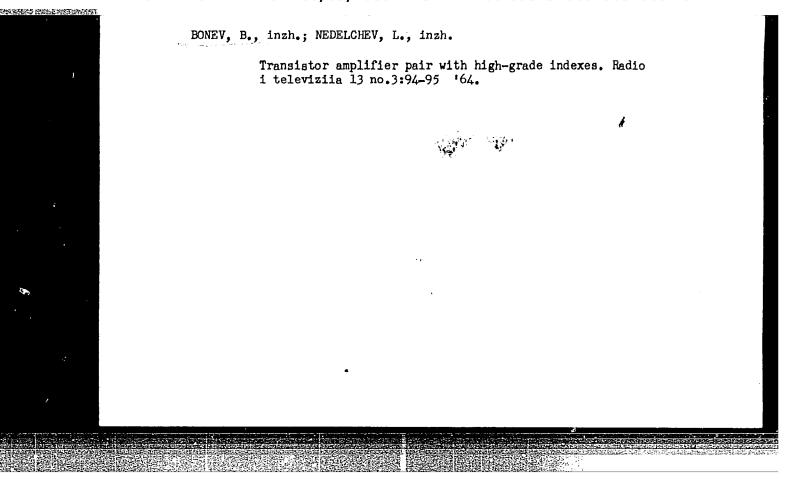
SPIROV, G.; BONEV, As. KIRYAKOV, Tv.

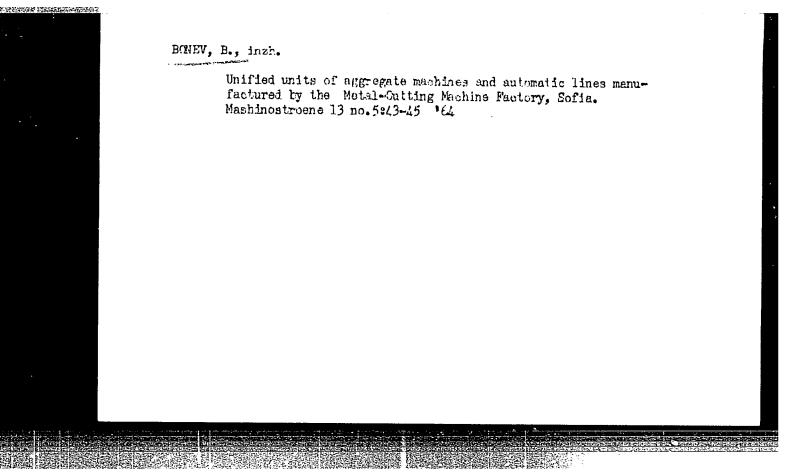
Current problems of urogenital trichomoniasis. Suvr. med. 16 no.11: 690-700 '65.

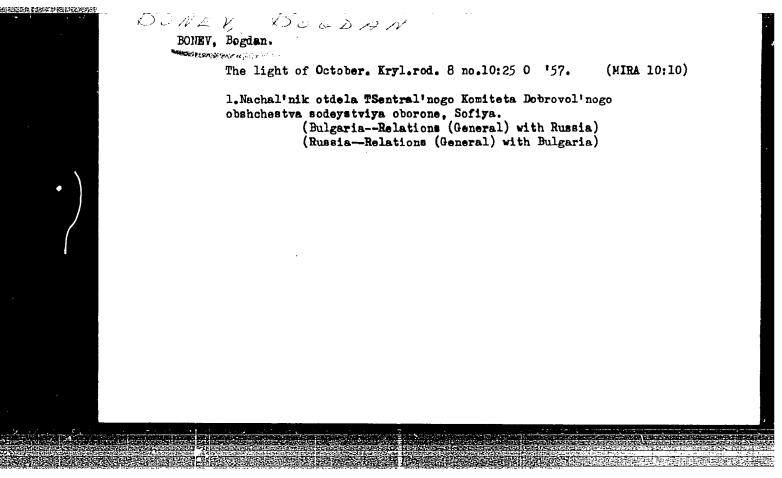
1. Nauchno-izsledovatelski kozhno-venerologichen institut (direktor - prof. P. Popkhristov).

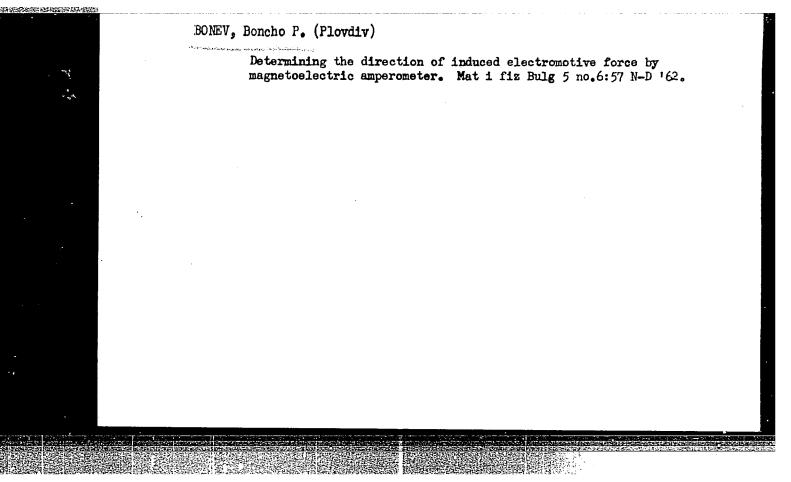


| Secretar manyantarian |  |                       |
|-----------------------|--|-----------------------|
| BONEV                 | , B.   |                       |
|                       | A small rotatable dome for a telescope. Biul. VAGO   | no.34:<br>(MIRA 17:4) |
|                       | l. Narodnaya astronomicheskaya observatoriya imeni Yu.<br>Gagarina, g.Stara Zagora, Bolgariya. | .A.                   |
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BONEV, D.

Selecting the method of purifying water for the water purification station for the water supply lines of Sofia. Nauch. trudy AKKH no.22:91-102 '63. (MIRA 18:5)

1. Glavnyy inzh. proyekta vodoochistnoy stantsii v.g.Sofii.

ANGELOV, A., dots.; BONEV, D., inzh.

The water supply of Sofia from the Iskur Dam. Khidrotekh i melior 7 no.9:287-288 162.

ANGELOV, G.; DENEV, I.; STOIMENOV, Kr.; MUKHAREV, N.; BONEV, D.

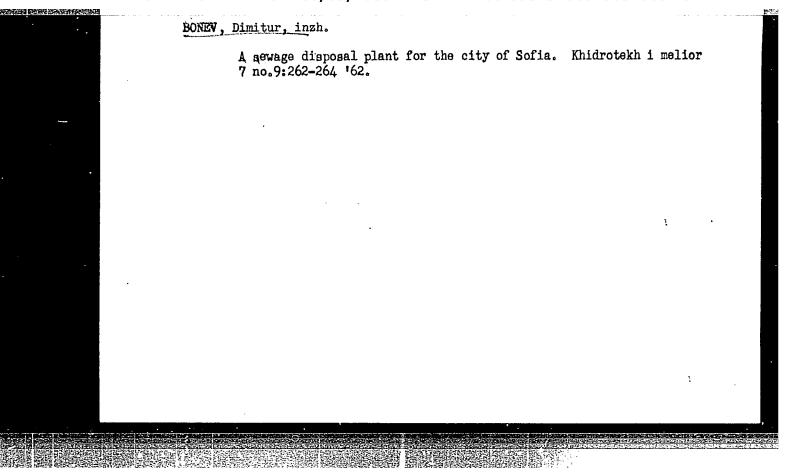
Distribution of hydatigenous taeniasis and cysticercosis in northeastern Bulgaria. Izv khelmint lab BAN 9:91-96 '64.

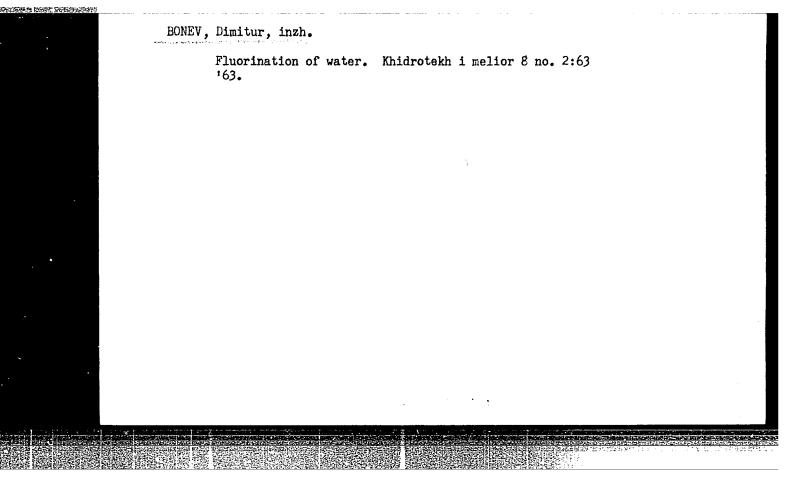
BONEY, Dimitur, insh.

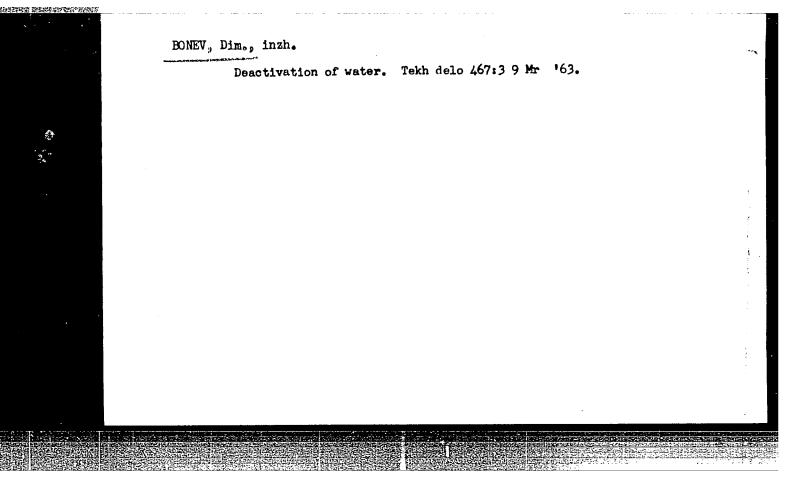
Experimental station at the "Pasarel" Hydroelectric Power Plant. Tekh delo no.437:3 4 Ag '62.

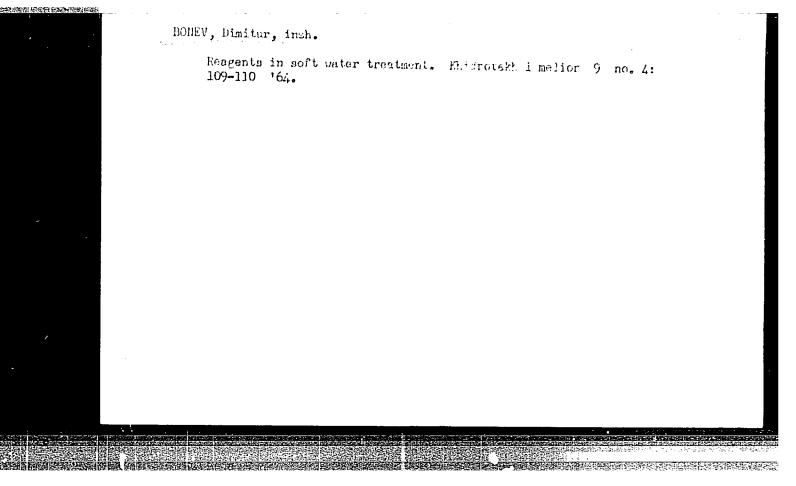
1. Glaven inshener na proekt "Vodoprechistvatelna stantsiia na gr. Sofiia."

The new water supply of Sofia. Khidrotekh i melior 7 no.4:121-123 162.







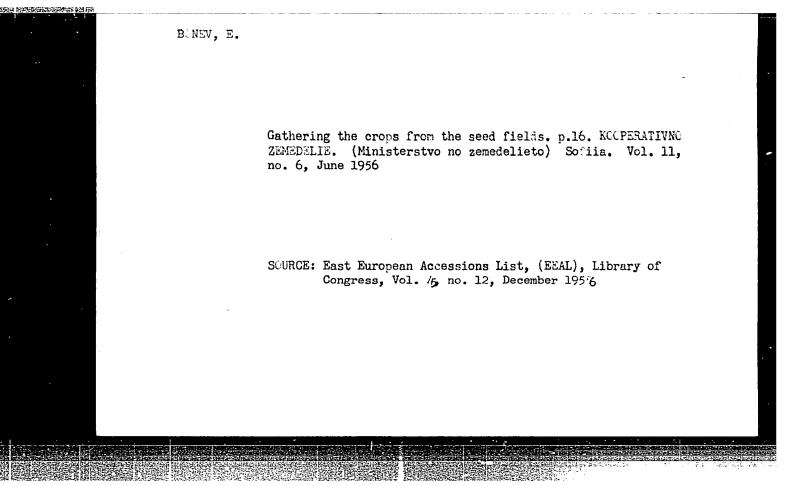


#### BONEV, E.

BONEY, E. Rubber on the capitalist market. p. 24.

Vol. 6, no. 6, 1956, GEOGRAFIIA, Sofiya, Bulgaria.

SO: Monthly List of East European Accessions, (EEAL), LC, Vol. 5, No. 10, Oct. 1956.



BONEV, E.

Some sorts of field crops. p.22.
(KOOPERATIVNO ZEMETELIE, No. 7, July 1957, Sofia, Bulgaria.)

SO: Monthly List of East European Accessions (EEAL) LC, Vol. 6, no. 12, Tecember 1957, Uncl.

BONEV, E.

Suitable hybrid-corn seed. p. 14. (Kooperatvino Zemedelie, Vol. (12), no. 2, Feb. 1957. Sofiis, Bulgaria)

SO: Monthly List of East European Accessions (EEAL) LC, Vol. 6, no. 10, October 1957. Uncl.

BONEV, E.

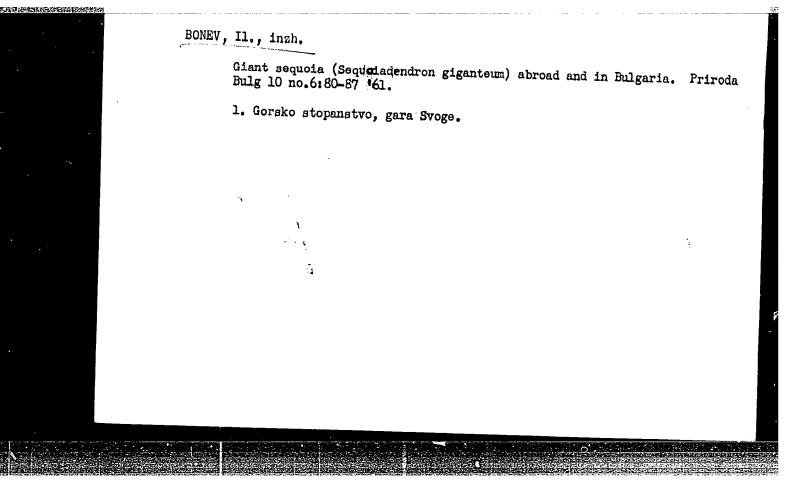
High-quality seed material. p. 16. (Kooperatvino Zemedelie, Vol. (12) no. 6, June 1957. Sofiia, Bulgaria)

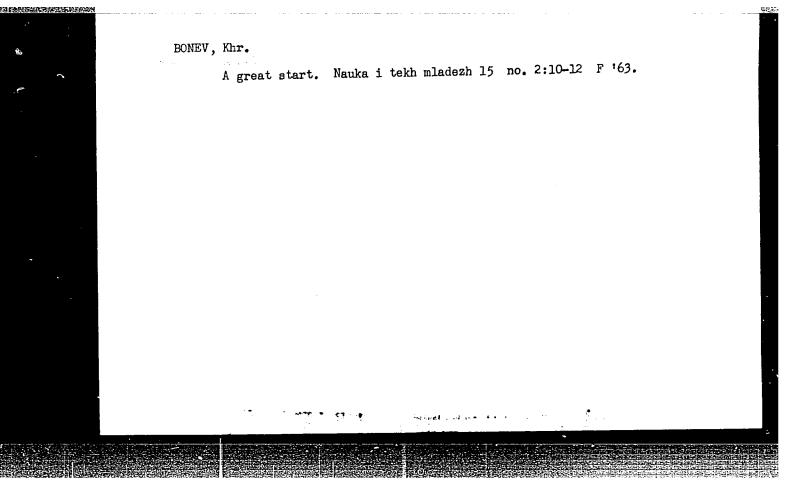
SO: Monthly List of East European Accessions (EEAL) IC, Vol. 6, no. 10, October 1957. Uncl.

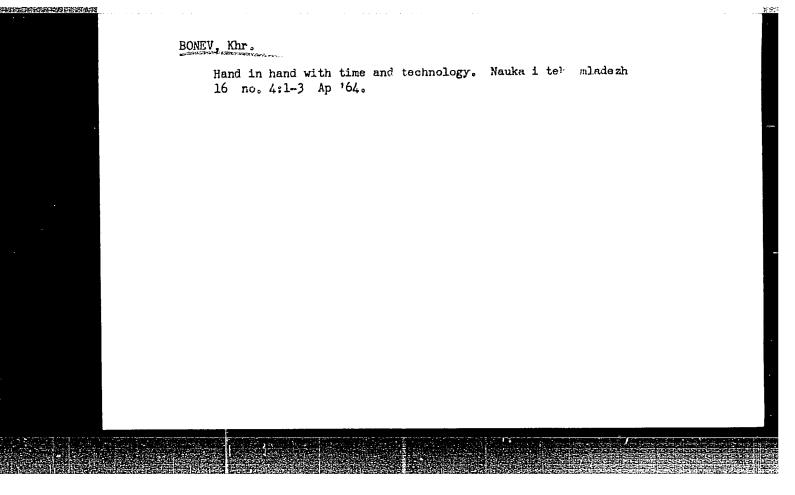
BONEV, I.

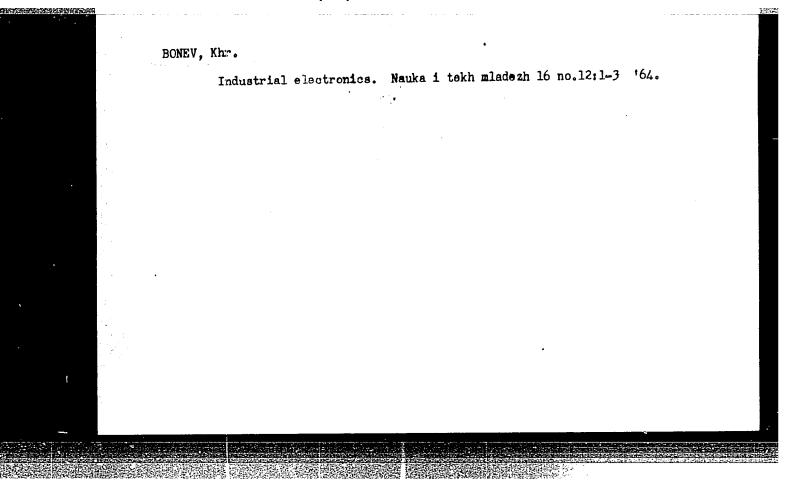
BONEV, I. Some deficiencies in the standards for lumber materials. p. 38. Vol. 6, no. 7, July 1956. RATSIONALIZATSIA. Sofiia, Bulgaria

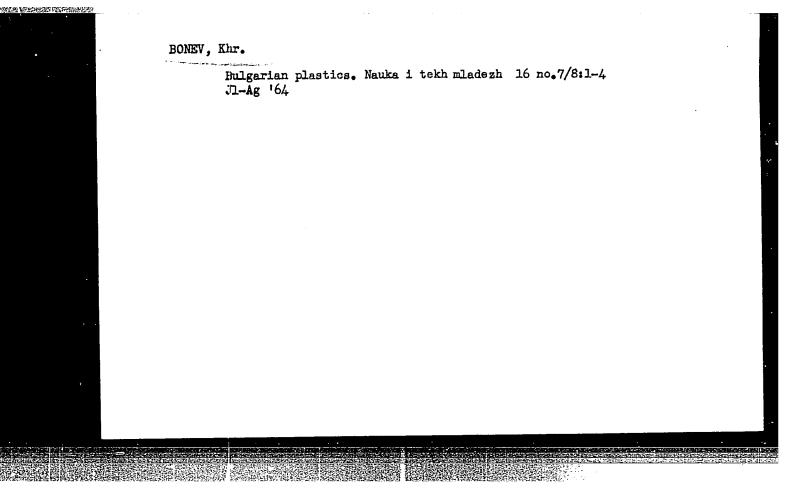
SOURCE: East European Accessions List (EEAL) Vol 6, No. 4--April 1957

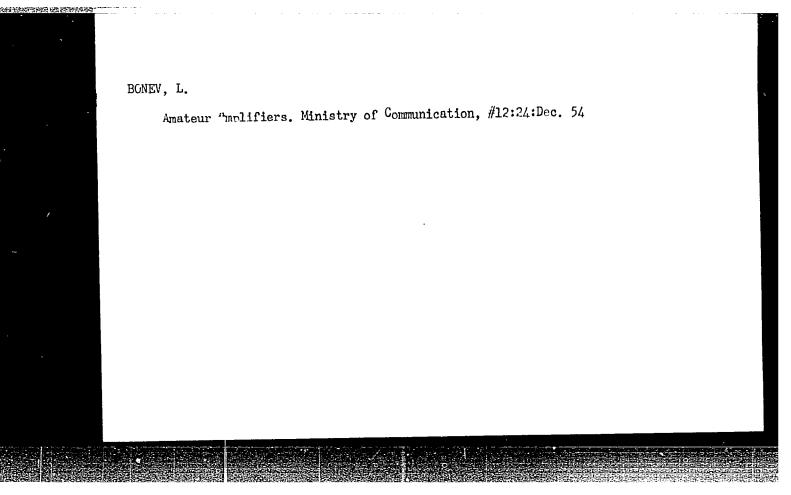


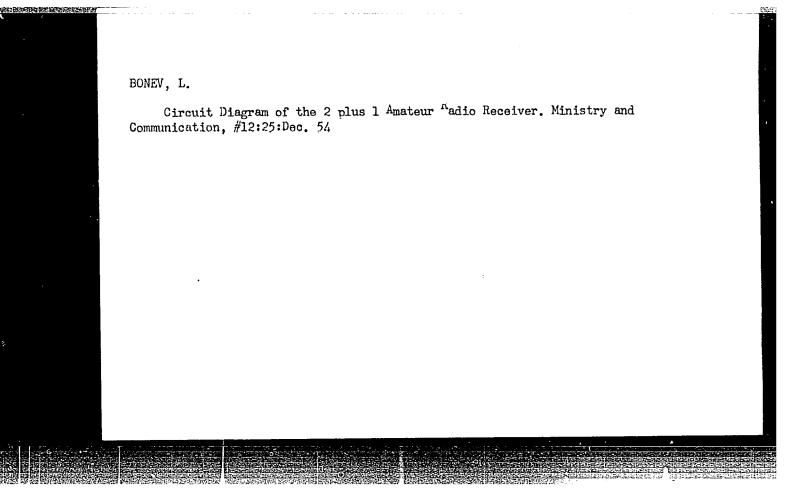












BONEV, L.

More about phonograph amplifiers. p. 30. (Radio, Vol. 5, no. 12, 1956, Bulgaria)

SO: Monthly List of East European Accessions (EEAL) LC, Vol. 6, no. 6, June 1957, Uncl.

BONEV, L.

Appartus for discovering metal objects. p. 57.
(RADIO I TELEVIZIIA, Vol. 6, no. 2, 1957, Sofia, Bulgaria.)

SO: Monthly List of East European Accessions (EEAL) 1C, Vol. 6, no. 12, December 1957 Uncl.

BONEV, L.

Extreme stage for amateur radio transmitter. p. 21. (RADIC I TELEVIZIIA, Vol. 6, no. 6, 1957, Sofia, Bulgaria.)

SO: Monthly List of East European Accessions (EEAL) LC, Vol. 6, no. 12, December 1957 Uncl.

KOLAROV, V.; BONEV, L.; ROBEV, S.

Scinteillating properties of some triaryl-substituted representatives of the imidazole series. Doklady BAN 15 no.2:167-170 '62.

1. Otdeleniye radiobiologii, Sofia, 56. Predstavleno chl.-korr. A. Spasovym [Spasov, A.].

B/007/62/000/002/006/012 D204/D307

AUTHORS:

Kolarov, V., Bonev, L. and Robev, S.

TITLE:

Studies of the scintillating properties of some triazyl-substituted members of the imidazole series

PERIODICAL:

Referativnyy byulleten' Bolgarskoy nauchnoy literatury, Khimiya i khimicheskaya tekhnologiya, no. 2, 1962, 7, abstract 109, Doklady BAN, 15, 1962, book

2, pp 167-170

TEXT: The authors studied the scintillating properties of some triazyl-substituted imidazoles (2,4,5-triphenylimidazole, 2,4,5-tri(4-tolyl)-imidazole, and 2,4,5-tri(2-thionyl)-imidazole) and also hydrobenzamide, amarin and isoamarin, having the same atomic structure. Xylene solutions of various concentrations were prepared from these compounds, and their scintillating properties were studied under standard conditions. A  ${\rm Co}^{60}$  preparation with  ${\rm 10}^{6}$  disintegrations per minute was used as the source of ionization. The triazyl-substituted imidazoles showed good scintillation properties and,

Card 1/2

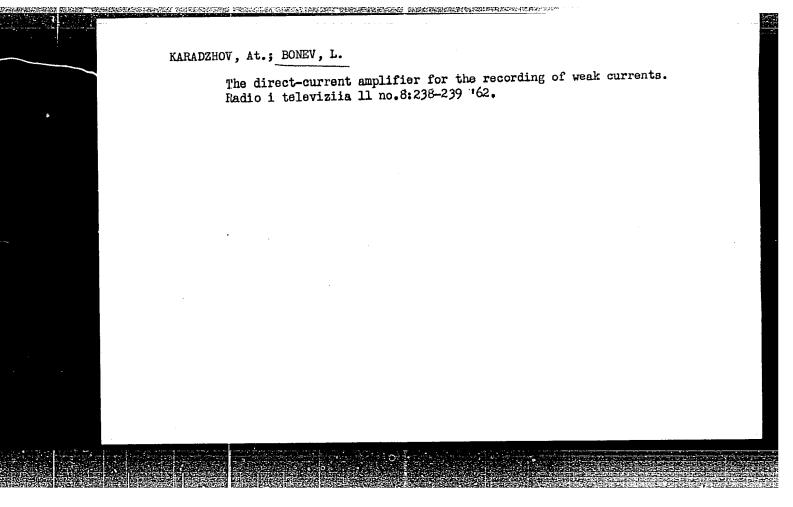
Studies of the scintillating ...

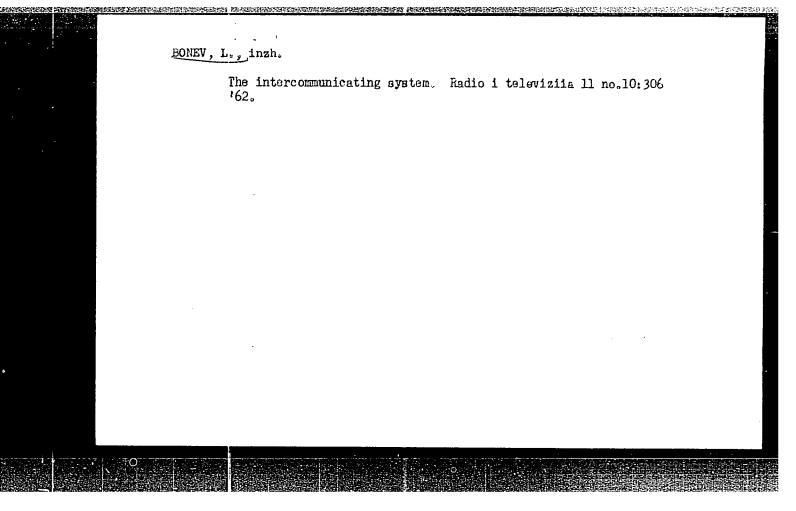
B/007/62/000/002/006/012 D204/D307

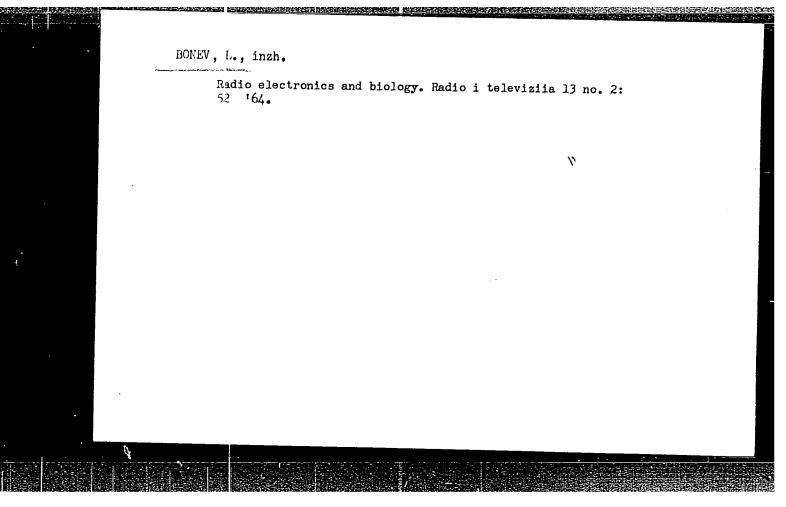
bearing in mind their ease of preparation, can be successfully used in radiometry. Photoluminescent maxima in the excitation spectra of 2,4,5-triphenylimidazole and 2,4,5-tri(4-tolyl)-imidazole occur at 390 and 400 m/m and are in the spectral regions convenient for working with ordinary photomultipliers. These substances may also be used for displacing the photoluminescent spectra of other compounds, the luminescent maximum of which lies in the ultraviolet region of the spectrum. Amarin and isomarin exhibit no scintillating properties. (Otdeleniye radiobiologicheskikh nauk, Sofia, 36 (The Department of Radio-Biological Sciences, Sofia, 36))

Abstracter's note: Complete translation

Card 2/2







Clarification of some aspects of respiration with the help of electronic registration of respiratory movements. Nauch. tr. vissh. med. inst. Sofiia 43 no.5:31-39 '64.

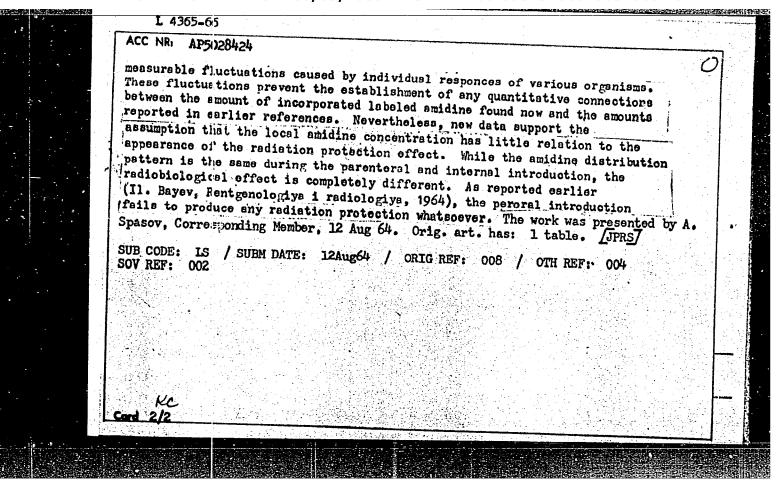
1. Chair of Pathophysiology (Director: Prof. St. Pisarev) and Institute of Radiclogy and Radiation Hygiene (Director: Doz. N. Nikolov).

ROBEV,S.; L.V,1.; BGNEV,L.

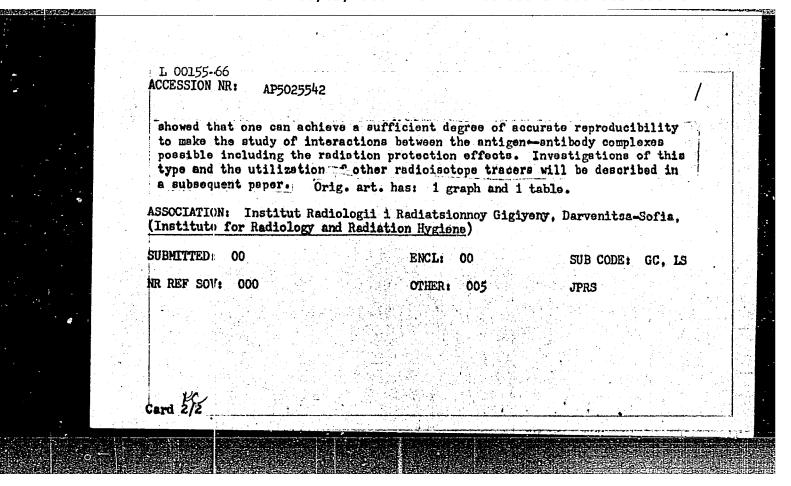
The distribution of N-(4-nitrophenyl)-benzamidine-C-1/ - - - organs of white rats under conditions of its use for radioprotective purposes. Dokl. Bolg. akad. nauk 18 no.1:51-54 'c.

1. Submitted on August 19, 1964.

L 4365-56 EWI(m) ACC NR: AP5()28424 SOURCE CODE: BU/0011/65/018/001/0051/0054 AUTHOR: Robev, S.; Bayev, I.; Bonev, L. ORG: Scientific-Research Institute of Radiology and Radiation Hygiene, Sofia (Nauchno-issledovatel'skiy institut radiologii i radiatsionnoy gigiyeny) TITIE: Distribution of N-(4-nitrophenyl)-benzo-C14-amidine in organs of white rats when used for radiation protection SOURCE: Bulgarska akademiya na naukite. Doklady, v. 18, no. 1, 1965, 51-54 TOPIC TAGS: mouse, rat, antiradiation drug, organic amide, radiation biologic effect ABSTRACT: /Russian srticle/ The study of the distribution within organisms of compounds exhibiting radiation protection properties is of great importance for the explanation of the particular protective mechanism. The authors! earlier studies of the radiation protection action of amide compounds on mice and rats (see, e.g., J. Baev, S. Robev, Compt. rend. Acad. bulg. Sci., 15, 1962, No 6, 613) uncovered essential differences between their protective actions and those of sulfhydryl radiation protectors of the cysteamine group. The present study concentrated on a detailed investigation of the distribution of N-(4-nitrophenyl)-benzoamidine and, in particular, in white rate. Tabulated results show that the variations of the specific activity in organs of various snimals exhibite Card 1/2



L 00155-66 EWT (m) DIAAP ACCESSION NR: AP5025542 BU/0011/65/018/003/0239/0242 AUTHOR: Bonev, L.; Todorov, S; Robev, S. TITIE: Possibility of a quantitative tracking of the precipitation reaction using radioactively labeled chromium -51 SOURCE: Hulgarska akademiya na naukite. Doklady, v. 18, no. 3, 1965, 239-242 TOPIC TAGS: chemical labelling, chromium, radioisotope, chemical precipitation, iron, radiation chemistry, biochemistry, tracer study ABSTRACT: The existing methods for gauging the precipitation reaction are for from a true quantitative determination of the antigen -- antibody reaction. In all the cases one does not know the exact composition of the precipitate which is usually contaminated by admixtures which reacted with the reagents used. In addition, the usual methods are slow and cumbersome. The present paper presents the first results using radioactively labeled trivalent chromium-51. The trivelent chromium was chosen because it can be hydrolyzed into nonsoluble chromium hydroxide at pH7 characterizing the usual precipitation reaction. The results were in agreement with data from other methods. Further studies using double radioactive labeling by chromium-51 and iron-5 Card 1/2



BULGARIA

BONEY Las Special Polyclinic for Students, Varna (chief physician: P. STO-YANOV)

"Ambulatory Treatment of Enuresis Nocturna in Children of School Age, with Psychopharmacological Drugs."

Sofia, <u>Nevrologiva. Psikhiatriya i Nevrokhirurgiva</u>, Vol 5, No 2, 1966, pp 116-121

Abstract [author's Russian and English summaries, modified]: A preliminary report on experience with the ambulatory psychopharmacological treatment of enuresis nocturna in 140 children of school age. In 106 cases to franil was employed, alone or in combination with chlorpromazine, meprobamate or actedron. The rest of the cases were treated only with chlorpromazine, meprobamate and actedron, with almost identical therapeutic effects. Treatment was continued over an average period of two-three months. The immediate results were good in 89.3 percent; unsatisfactory, in 5.7 percent; and with no effect, in 5 percent of the patients. It is pointed out that this treatment is superior to former antienuretic methods since it influences rapidly and simultaneously enuresis and a number of additional neurotic and cerebrasthenic syndromes. Side effects were minor and could be abolished by decreasing the dosage. The author regards this treatment as pathogenetic ally substantiated and recommends its broad application. 14 Soviet-bloc and 12 Western refs. Received in Dec 64.

KAICHEV, K.; BONEV, L.; MITRANI, L.; DESSEV, G.[Desev, G.]; ROBEV, S.

Studies on the possibility of eliminating radioactive strontium from milk by means of ion-exchange resins. Doklady BAN 14, no.5:475-478 '61.

1. Research Base on the Problems of Radiation Diseases and Radiological Protection at the Onkological Research Institute, Sofia. Submitted by Corresponding Member Al. Spassov[Spasov, Al.]

(Strontium) (Milk) (Radioactivity)

Boner, M.

BULGARIA/Chemical Technology - Chemical Products and Their Application - Food Industry.

H-28

: Ref Zhur - Khimiya, No 3, 1958, 9677 Abs Jour

Author

Bonev M.

Inst

Chemical and Technological Characterization of Pasteurized

Title

Tourto Juice from Different Varieties of Tomatoes.

Orig Pub

: Nauchn. tr. Vissh. in-t khranit. i vkus. prom-st. Plovdiv,

1956, 3, 315-323

Abstract

: Presentation of the results of chemical and technological characterization of pasteurized tomato juices obtained from tomato varieties newly developed in Bulgaria. In all the juices the content of soluble solids amounts to 6.38-5.78%, i.e., exceeds the specified minimum permissible norm (5.5%); the content of sugars is of 4.06-3.40%, total acidity 0.40-0.28%, the ratio of sugar content to

acid content is 14.25-8.22.

Card 1/1

Linnellin 1 CATEVIOLY : Chemical Technology. Chemical Products and Their APPROVED FOR RELEASE: 1.06/09/2000ooi C5A+RDP86-00513R000206310004-5" ABS. JOUR. : RZhKhim., No 19, 1959, No. 69543

AUTHOR

: Stefanova, M.: Bonev, M.: Duchevska, Kh.; Geordiyev,\*

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A div of Certain Varieties of Cresh and Storial Tomatoes and of Concentrates Derived from Them.

ORIG. PUB.

: Izv. In-te rasteniyevdstvo. Bulg. AN, 1958, kn.

6, 69-80

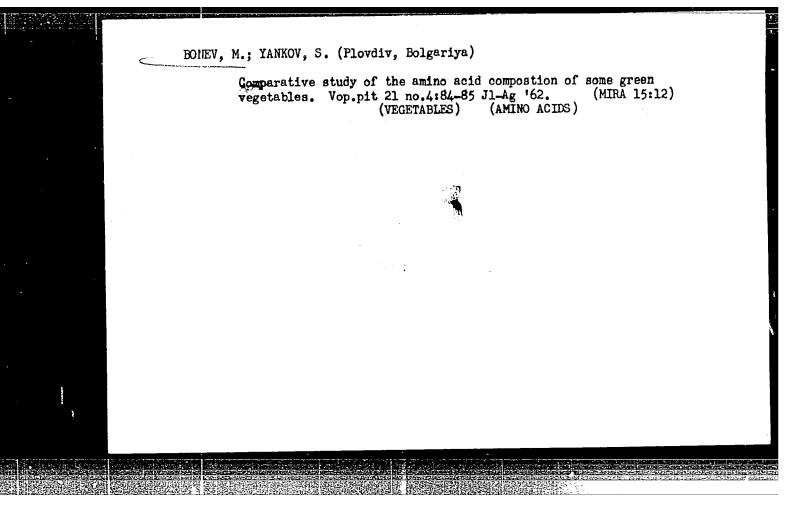
ABSTRACT

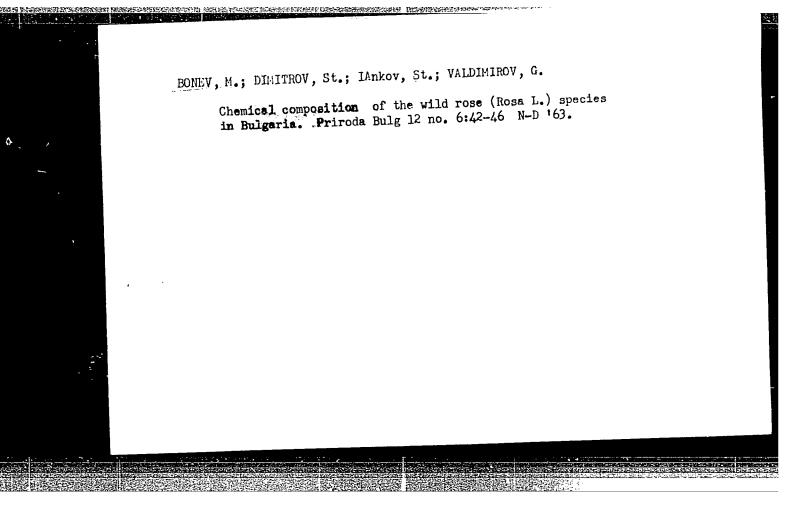
: Through experimentation performed on 4 varieties of lomatoes it was established that in the areperation of concentrates (C) from tomatoes, that were stored for 2-4 days, the consumption of raw meterials for 1 kg of 30% C increases by 0.1-0.7kg. Sperage of tomatoes for 2-4 days prior to their processing lowers considerably their quality [ loss up to 24.5% of their sugar content and up to 38.18% of their ascerbic acid (I) content]. C made of tomatoes that were stored for 2-4 days

\*D.; Yenkov, S.

Card:

1/2





BONEV, N.

Basic principles and tasks of technical standardization of labor. p. 4. LEKA PROMISHLENOST, Sofiya, Vol. 4, no. 2, 1955.

SO: Monthly List of East European Accessions, (EEAL), LC, Vol. 4, no. 10, Oct. 1955, Uncl.

